

Science and Technology for National Security: The Next 50 Years

Pioneering the Endless Frontier

A Global Security Futures Project

Invited Participants

Leading experts in national security, and science and technology are invited from U.S. government agencies, national laboratories, research universities, research centers and institutes, and industry, as well as from the international community.

Hosted by

Ronald F. Lehman II, Director
Center for Global Security Research
Lawrence Livermore National Laboratory

For Information

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Science and Technology for National Security

From the end of World War II through the end of the Cold War, science and technology played a significant role in contributing to U.S. national security, from the development of nuclear weapons, air defense and ballistic missile systems, through the race in space, to breakthroughs in biotechnology and computations. During this time the U.S. invested heavily in both military and civilian science R&D, from academia, to industry, to the national laboratories, including research, people, and infrastructure. Today science and technology contribute heavily to the national security portfolio as part of our conventional and nuclear

deterrent, our defenses, and more recently to homeland security. As we move into the first half of the 21st century in a world reordered by new threats and challenges it is time to examine how science and technology can continue to contribute to U.S. national security. We will critically examine science and technology requirements imposed by national security, as well as the challenges and constraints to security that may be due to science and technology.

Questions

Key national security needs, including: threats and vulnerabilities; requirements; partners; constituencies? Where is science going, including: key breakthroughs; grand challenges; constraints; recruiting the next generation; infrastructure requirements; roles of industry and academia in R&D? Implications for national security posed by technology and globalization, including: “Internationalization” of science; demographic changes; globalization of industry

National Security Future

Key national security needs and requirements? Shape of the world we would like to live in 20 years? In 50 years? International dimensions and how are they addressed? Role of international cooperation in supporting national security? Affordability of national security in the future economy? Sustainability of effort? Impacts of demographic change? Establishing and maintaining deterrence for national and non-state actors?

Future of Science and Technology

Essential national security missions: Surviving as a Nation, including Defense and Homeland Security; Prospering as a People, including, Infrastructure and Economic Security, Healthcare and Environmental Quality, Research and Education, Agriculture and Food Security Energy Security; Assure Global Stability, including Worldwide Economic and Social Development? Science and technology that underlie and support these missions? Evolution of science and

technology in 20, 50 years? Organizational principles to accomplish these missions? Barriers to success?

Technology and Globalization

Impact of globalization on national security? Maintaining transparency and openness in international collaborations while still protecting critical information and technologies? Will national security be globalized? Commercialized? Integration of science, policy and law? Shared missions across international boundaries? Education and workforce challenges? Impacts of demographic change?

Exploratory Workshops

We are planning a series of interactive workshops to examine these questions and issues, engage key thinkers, and prepare input for the final conference. Our method is to pose specific questions that will define what we know, what we do not know or cannot agree on, and what is needed to resolve the unknowns. Dates and locations will be posted on our web site. Participation is by invitation.

Web Site Interaction

As ideas are developed and the details of the workshops and conference are set, these will be posted at: <http://cgssr.llnl.gov/>
Participants are encouraged to review this information and send your questions and comments to Eileen Vergino.

Conference

September 18–19, 2002 Livermore, California

The conference format will be interactive with presentation and integration of the workshop findings on the first day and interaction with a group of distinguished national leaders and experts on the final day. The goal is to formulate specific predictions useful for defining national strategy and policy, and to identify the highest priority elements for future work.

Invited Participant Database

Name		
Name preferred on name tag		
Title		
Organization		
Street Address		
City	State	Zip
Citizenship		Birthdate
Birthplace: City		Country
Office Phone		
Fax		
Email		

Specific Area of Interest

- ☐ National Security Future
- ☐ Future of Science and Technology
- ☐ Technology and Globalization

Participant's data must be submitted prior to their participation in this project. No fee is charged; meals will be provided. Send information to:

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A Global Security Futures Project

The Center for Global Security Research, in collaboration with other security study centers, universities, and governmental and non-governmental organizations, and accessing the significant technical capabilities of the Lawrence Livermore National Laboratory, probes issues at the intersection of technology and policy. Our goal is to provide fresh insight into important national security issues. While most of our projects focus on present international security concerns, this futures project looks out beyond the next decade in order to guide current actions toward a more secure world.

Conference Location

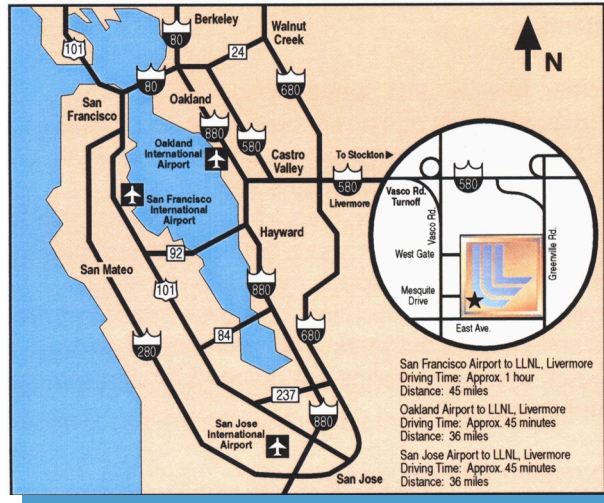
September 18–19, 2002
Lawrence Livermore National Laboratory
7000 East Avenue
Livermore, CA 94550

Conference Interactive Web Site

<http://cgsr.llnl.gov/>

For further information contact

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Workshops Throughout 2002

Conference September 18–19, 2002 Livermore, California

A Global Security Futures Project
sponsored by the

